

*Abstract*

A system automatically adaptively modifies a fail-over configuration priority list of back-up devices of a group (cluster) of processing devices to improve availability and reduce risks and costs associated with manual configuration. A system is used by individual processing devices of a group of networked processing devices, for managing operational failure occurrences in devices of the group. The system includes an interface processor for maintaining transition information identifying a second processing device for taking over execution of tasks of a first processing device in response to an operational failure of the first processing device and for updating the transition information in response to a change in transition information occurring in another processing device of the group. An operation detector detects an operational failure of the first processing device. Also, a failure controller initiates execution, by the second processing device, of tasks designated to be performed by the first processing device in response to detection of an operational failure of the first processing device.